INDEX FOR VOLUME 17

Aerial
  census of deer, 97
  census of salmon, 521
  observations, recording of, 539
Age determination
  avian, 89
  Hungarian partridge, 90
  waterfowl broods, 1
  woodcock, 29
Ammate in diet of deer, 33
Atkeson, Thomas Z. and Lawrence S. Givens. The use of hay crops in southeastern waterfowl management, 382
Atkeson, Thomas Z. and David C. Hulse. Trapping versus night hunting for controlling raccoons and opossums within sanctuaries, 159
Aub, J. C., see Hall, T. C., 516

Balham, Ronald W. and William H. Elder. Colored leg bands for waterfowl, 446
Baker, W. H., see Hall, T. C., 516
Baskett, Thomas S. Pruning as a means of thickening multiflora rose hedges, 87
Bass,
  black, food conversion in, 219
  striped, racial investigations of, 495
Bear, black, agriculture damage by, 331
Beard, Elizabeth B. The importance of beaver in waterfowl management at Seney Refuge, 398
Beaver,
  die-off in Minnesota, 376
  in waterfowl management, 398
Bemont, Donald R., obituary, 368
Bennett, Logan J., Obituary of J. Lee Dean, 369
Berard, Edward V., see Wilson, H. Lee, 98
Beshears, W. Walter and Arnold O. Haugen. Muskrats in relation to farm ponds, 450
Birds, effects on DDT on, 45
Blagbrough, Harry P., see Mitchell, Robert T., 45
Blouch, Ralph I. and L. L. Eberhardt. Some hatching curves from different areas of Michigan's pheasant range, 447
Bobwhite
  effect of hunting pressure on, 341
  streptomycin in spontaneous quail disease, 24
Brakage, George K. Migration and mortality of ducks hand-reared and wild-trapped at Delta, Manitoba, 465
Brazda, A. R. Elk migration patterns, and some factors affecting movements, 9
Buchholtz, K. P., see Hamilton, K. C., 509
Buechner, Helmut K. Book review, 212
Byrd, Mitchell A. High occurrence of *Taenia taeniaformis* in the muskrat, 384

Cahalane, Victor H. Book review, 210
Cahoon, Willie G. Commercial carp removal at Lake Mattamuskeet, North Carolina, 312
Campbell, Robert S. and Arthur Witt, Jr. Impressions of fish scales in plastic, 218
Carlander, Kenneth D. Book reviews, 527, 528
Carp removal, at Lake Mattamuskeet, 312
Cat, house, food habits in Texas, 375
Census
  aerial deer, 97
  aerial salmon, 521
  mourning dove, 437
  ruffed grouse, 292
Cheatum, E. L., see Jellison, William L., 217
Check stations, big-game in Colorado, 256
Clarke, C. H. D. Book review, 534
Clothier, William D. Fish loss and movement in irrigation diversions from the West Gallatin River, Montana, 144
Coffin, A. Lynn and Jack D. Remmington. Pregnant yearling cow elk, 223
Control
  Japanese honeysuckle in wildlife borders, 301
  rabbits in Australia, 482
  weeds in food patches, 509
Cooch, Graham. Techniques for mass capture of flightless blue and lesser snow geese, 460
Cook, Arthur H. Book review, 211
Cover mapping, autumn colors as an aid in, 98
Crandell, Harry B., see Halloran, Arthur F., 318
Crane, Harold S. and Dale A. Jones. Initial proof of mule deer fawns breeding in Utah, 225
Crissey, Walter F. Use of a dictating machine to record aerial observations, 539

Dahlka, Kenneth J., see Hunt, George S., 92

INDEX FOR VOLUME 17

Aerial
  census of deer, 97
  census of salmon, 521
  observations, recording of, 539
Age determination
  avian, 89
  Hungarian partridge, 90
  waterfowl broods, 1
  woodcock, 29
Ammate in diet of deer, 33
Atkeson, Thomas Z. and Lawrence S. Givens. The use of hay crops in southeastern waterfowl management, 382
Atkeson, Thomas Z. and David C. Hulse. Trapping versus night hunting for controlling raccoons and opossums within sanctuaries, 159
Aub, J. C., see Hall, T. C., 516

Balham, Ronald W. and William H. Elder. Colored leg bands for waterfowl, 446
Baker, W. H., see Hall, T. C., 516
Baskett, Thomas S. Pruning as a means of thickening multiflora rose hedges, 87
Bass,
  black, food conversion in, 219
  striped, racial investigations of, 495
Bear, black, agriculture damage by, 331
Beard, Elizabeth B. The importance of beaver in waterfowl management at Seney Refuge, 398
Beaver,
  die-off in Minnesota, 376
  in waterfowl management, 398
Bemont, Donald R., obituary, 368
Bennett, Logan J., Obituary of J. Lee Dean, 369
Berard, Edward V., see Wilson, H. Lee, 98
Beshears, W. Walter and Arnold O. Haugen. Muskrats in relation to farm ponds, 450
Birds, effects on DDT on, 45
Blagbrough, Harry P., see Mitchell, Robert T., 45
Blouch, Ralph I. and L. L. Eberhardt. Some hatching curves from different areas of Michigan's pheasant range, 447
Bobwhite
  effect of hunting pressure on, 341
  streptomycin in spontaneous quail disease, 24
Brakage, George K. Migration and mortality of ducks hand-reared and wild-trapped at Delta, Manitoba, 465
Brazda, A. R. Elk migration patterns, and some factors affecting movements, 9
Buchholtz, K. P., see Hamilton, K. C., 509
Buechner, Helmut K. Book review, 212
Byrd, Mitchell A. High occurrence of *Taenia taeniaformis* in the muskrat, 384

Cahalane, Victor H. Book review, 210
Cahoon, Willie G. Commercial carp removal at Lake Mattamuskeet, North Carolina, 312
Campbell, Robert S. and Arthur Witt, Jr. Impressions of fish scales in plastic, 218
Carlander, Kenneth D. Book reviews, 527, 528
Carp removal, at Lake Mattamuskeet, 312
Cat, house, food habits in Texas, 375
Census
  aerial deer, 97
  aerial salmon, 521
  mourning dove, 437
  ruffed grouse, 292
Cheatum, E. L., see Jellison, William L., 217
Check stations, big-game in Colorado, 256
Clarke, C. H. D. Book review, 534
Clothier, William D. Fish loss and movement in irrigation diversions from the West Gallatin River, Montana, 144
Coffin, A. Lynn and Jack D. Remmington. Pregnant yearling cow elk, 223
Control
  Japanese honeysuckle in wildlife borders, 301
  rabbits in Australia, 482
  weeds in food patches, 509
Cooch, Graham. Techniques for mass capture of flightless blue and lesser snow geese, 460
Cook, Arthur H. Book review, 211
Cover mapping, autumn colors as an aid in, 98
Crandell, Harry B., see Halloran, Arthur F., 318
Crane, Harold S. and Dale A. Jones. Initial proof of mule deer fawns breeding in Utah, 225
Crissey, Walter F. Use of a dictating machine to record aerial observations, 539

Dahlka, Kenneth J., see Hunt, George S., 92

Dalke, Paul D. Yields of seeds and mast in second growth hardwood forest, 378
Damage
agricultural, by black bear, 331
to conifers by hare and deer, 487
to electric cables by pocket gophers, 296
to farm ponds, by muskrats, 450
to seed crops of sugar pine, 128
Davenport, Leslie B., Jr. Agricultural depredation by the black bear in Virginia, 331
DDT, effects of, on song birds, 45
Deen, J. Lee, obituary, 369
Deer
aerial census of, 97
ammate in diet of, 33
canine teeth in, 100
competition with sheep in Utah, 101
damage to planted conifers, 487
irruption on Necedah Refuge, 166
mule, fawns breeding, 225
paralysis in, 516
secondary sex ratio in, 95
DeLaBarre, Cecil Franzen, obituary, 208
de Sylva, Donald P., see Raney, Edward C., 495
Disease
beaver die-off in Minnesota, 376
brucellosis in a moose, 217
Leucocytozoon in ruffed grouse, 536
myxomatosis in rabbits, 482
spontaneous quail, 24
Taenia taeniaformis in muskrat, 384
Dove, mourning
census of, 437
population ecology, 132
Ducks
eagles in relation to breeding of, 55
live trapping of diving, 92
migration and mortality of, 465
recuperative rate of mallard, 541

Eagles, relation to breeding ducks, 55
Eberhardt, L. L.,
see Blouch, Ralph I., 477
see MacMullen, R. A., 322
Edminster, Frank C. Snapping turtle catches pheasant, 383
Eicher, George J. Aerial methods of assessing red salmon populations in western Alaska, 521
Elder, William H., see Balham, Ronald W., 446
Elk
association with moose on feeding grounds, 162
migration patterns and movements, 9
pregnant yearling cow, 223
reproduction of Yellowstone, 177
Elkins, W. A. Book review, 532
Emmons, A. H., see Krumholz, Louis A., 456
Erickson, Arnold B. *Leucocytozoon bonasae* in ruffed grouse, 536
Errington, Paul L. On Scandinavian literature in wildlife management and ecology, 393

Fish
loss in irrigation diversions, 144
preparation of tissues for radioassay, 456
scales, impressions in plastic, 218
tags, reliability of, 268
Fishel, Charles W., see Jellison, William L., 217
Flaxedil, to produce paralysis in deer, 516
Food conversion in black bass, 219
Food habits
of bighorn sheep, 318
of feral house cats, 375
of gallinaceous birds and intestinal morphology, 197
of mountain quail, 204
of waterfowl, 120
Food patches, control of weeds in, 509

Gamebird weights, 36
Givens, Lawrence S., see Atkeson, Thomas Z., 382
Glazener, W. C. and Walter P. Taylor. Obituary of Henry C. Hahn, Jr., 369
Gooden, Samuel K. A collapsible quail trap, 389
Goose
blue, trapping of, 460
Canada, blood parasites in, 185
, nesting in Alaska, 536
, sex determination in, 542
Gophers, pocket, gnawing electric cables, 296
Greeley, Frederick. Sex and age studies in fall-shot woodcock from southern Wisconsin, 29
Grouse, ruffed
drumming count, 292
Leucocytozoon in, 536
weights, 391
Growth rate of raccoon fetus, 320
Gunvalson, Vernon E., see Petraborg, Walter H., 292

Hahn, Henry C., Jr., obituary, 369
Hall, T. C., E. B. Taft, W. H. Baker, and J. C. Aub. A preliminary report on the use of flaxedil to produce paralysis in the white-tailed deer, 516
Halloran, Arthur F. and Harry B. Crandell Notes on bighorn food in the sonoran zone, 318
Hamilton, K. C. and K. P. Buchholtz. Use of herbicides for establishing food patches, 509
Hanson, Harold C. Aid for the exploration of the avian cloaca for characters of sex and age, 89
see Levine, Norman D., 185
Hare, snowshoe, damage to conifers by, 487
Harris, Stanley W., see Yocum, Charles F., 204
Hatching curves of pheasants, 477
Haugen, Arnold O. Ammate in diet of deer, 33
see Beshears, W. Walter, 450
Herbicides, for establishing food patches, 509
Herman, Carlton M. A review of experiments in biological control of rabbits in Australia, 482
Hewitt, Oliver H. Obituary of Donald R. Bemont, 368
Editor's note, 392
Hickey, Joseph J. and Robert C. McCabe. Sex and age classes in the Hungarian partridge, 90
Hoffmeister, Donald F., see Van Gelder, Richard G., 100
Holton, George D. A trout population study on a small creek in Gallatin County, Montana, 62
Honeysuckle, Japanese, control of, 301
Hopkins, Milton N. and Eugene P. Odum. Some aspects of the population ecology of breeding mourning doves in Georgia, 132
Howard, Walter E. Tests of pocket gophers gnawing electric cables, 296
Hulse, David C., see Atkeson, Thomas Z., 159
Hunt, George S. and Kenneth J. Dahlka. Live trapping of diving ducks, 92
Hunting pressure and its effect on bobwhite, 341
Hutchinson, G. E., Book review, 372

Janson, Reuel G. Observations indicating egg-moving by nesting pheasants, 386
Jellison, William L., Charles W. Fishel and E. L. Cheatum. Brucellosis in a moose, 217
Jones, Dale A., see Crane, Harold S., 225
Jordan, James S. Consumption of cereal grains by migratory waterfowl, 120
Effects of starvation in wild mallards, 304
Julander, Odell, see Smith, Justin G., 101

Kirkpatrick, Charles M., and Harold E. Moses. Effects of streptomycin against spontaneous quail disease in bobwhites, 24
see Stullken, Donald E., 124
Kittams, Walter H. Reproduction of Yellowstone elk, 177
Krefting, Laurits W. and Joseph H. Stoeckeler. Effect of simulated snowshoe hare and deer damage on planted conifers in the lake states, 487
see Martin, F. R., 166
Krumholz, Louis A. and A. H. Emmons. Preparation of fish tissues for gross beta radioassay, 456
Kruse, Thomas E., see Lagler, Karl F., 219

Lagler, Karl F. and Thomas E. Kruse. Food conversion in black basses of the genus *Micropterus*, 219
Leonard, Justin W. Book review, 209
Leopold, A. Starker. Intestinal morphology of gallinaceous birds in relation to food habits, 197
Levine, Norman D. and Harold C. Hanson. Blood parasites of the Canada goose, 185
Llewellyn, Leonard M. Growth rate of the raccoon fetus, 320
Low, Jessop B., see McCullough, Robert M., 222

MacMullan, R. A. and L. L. Eberhardt. Tolerance of incubating pheasant eggs to exposure, 322
Mammals, size of holes to exclude predatory, 124
Marking
rabbits for field studies, 42
waterfowl by colored leg bands, 446
Martin, Alexander C., see Nelson, Arnold L., 36
Martin, F. R. and L. W. Krefting. The Necedah Refuge deer irruption, 166
Mast
acorn production in east Texas, 380
yields in second growth hardwoods, 378
McCabe, Robert C., see Hickey, Joseph J., 90

McCullough, Robert M. and Jessop B. Low. Waterfowl accidentally caught in muskrat traps, 222
McGinnes, Burd S. and Robert A. Beck. Recuperative rate of wing-shot mallard, 541
McGowan, Terry A. The call-count as a census method for breeding mourning doves in Georgia, 437
McMillan, John F. Measures of association between moose and elk on feeding grounds, 162
Migration
  elk, 9
  and mortality of ducks, 465
Mitchell, Robert T., Harry P. Blagbrough and Robert C. VanEtten. The effects of DDT upon the survival and growth of nestling songbirds, 45
Mortality and migration of ducks, 465
Moose
  association with elk on feeding grounds, 162
  brucellosis in, 217
Mosby, Henry S. Obituary of Cecil F. DeLaBarre, 208
Moses, Harold E., see Kirkpatrick, Charles M., 24
Muskrats
  in relation to farm ponds, 450
  raccoon predation on, 113
  Taenia taeniaformis in, 384
Myxomatosis, in Australia, 482

Needham, Paul R. and James P. Welsh. Rainbow trout in the Hawaiian Islands, 233
Nelson, Arnold L. and Alexander C. Martin. Gamebird weights, 36
Nelson, Urban C. Cliff-nesting Canada geese on the arctic slope of Alaska, 536

Obituaries, Bemont, Donald R., 368
  Deen, J. Lee, 369
  DeLaBarre, Cecil, 208
  Hahn, Henry C., Jr., 369
Odocoileus, secondary sex ratio in, 95
Odum, Eugene P., see Hopkins, Milton N., 132
Opossum control, 159

Parasites, blood, in Canada goose, 185
Parmalee, Paul W. Hunting pressure and its effect on bobwhite quail populations in east-central Texas, 341
  Food habits of the feral house cat in east-central Texas, 375
  see Petrides, George A., 380
Partridge
  Hungarian, sex and age classes in, 90
  Terminology, 386
Petraborg, Walter H., Edward G. Wellein and Vernon E. Gunvalson. Roadside drumming counts, a spring census method for ruffed grouse, 292
Petrides, George A. Aerial deer counts, 97
Petrides, George A., Paul Parmalee, and John E. Wood. Acorn production in east Texas, 380
Pheasant
  hatching curves of, 477
  egg-moving by, 386
  tolerance of eggs to exposure, 322
Populations
  mourning dove, 132
  trout, 62
Predation
  on muskrats by raccoon, 113
  on pheasants by snapping turtle, 383
Predators, size of holes to exclude, 124

Quail
  bobwhite, effect of hunting pressure on, 341
  disease, spontaneous in bobwhite, 24
  mountain, food habits of, 204
  trap, 389

Rabbits
  control of, in Australia, 482
  marking, for field studies, 42
Raccoon
  control of, 159
  growth rate of fetus, 320
  predation on muskrats, 113
Raney, Edward C. Book review, 214
  and Donald P. de Sylva. Racial investigations of the striped bass, 495
Recent publications, 216, 373–374, 535
Remington, Jack D., see Coffin, A. Lynn, 223
Reproduction of Yellowstone elk, 177
Reviews, 209–215, 371–373, 528–535
Rogers, Glenn E. Function and operation of big-game check stations in Colorado, 256
Rose, multiflora hedges, 87

Salmon, red, census of, in Alaska, 521
Severinghaus, C. W. Book review, 371

Sex determination
avian, 89
Canada goose, 542
Hungarian partridge, 90
woodcock, 29
Sex, secondary ratio in deer, 95
Shadle, Albert R. Captive striped skunk produces two litters, 388
Sheep
big horn, food habits, 318
competition with deer, 101
Skunk, produces two litters in captivity, 388
Smith, Justin G. and Odell Julander. Deer and sheep competition in Utah, 101
Smith, Richard H. A study of waterfowl production on artificial reservoirs in eastern Montana, 276
Songbirds, effects of DDT on, 45
Southwick, Charles. A system of age classification for field studies of waterfowl broods, 1
Starvation, effects of, in wild mallards, 304
Stenlund, Milton R. Report of Minnesota beaver die-off, 376
Stoeckeler, Joseph H., see Krefting, Laurits W., 487
Stroud, Richard H. Notes on reliability of some fish tags used in Massachusetts, 268
Stullken, Donald E. and Charles M. Kirkpatrick. A determination of hole sizes which exclude certain predatory mammals, 124
Swanson, Gustav A. Reviews, 209, 231, 371
Editor's note, 232

Taber, Richard D. The secondary sex ratio in *Odocoileus*, 95
Taft, E. B., see Hall, T. C., 516
Taylor, Walter P., see Glazener, W. C., 369
Tevis, Lloyd, Jr. Effect of vertebrate animals on seed crop of sugar pine, 128
Review, 530
Trap, quail, 389
Trapping
duck, diving, 92
geese, flightless, 460
raccoons and opossums, 159
Trout
population study on a small creek, 62
rainbow, in Hawaiian Islands, 233
Turner, Lewis B. A rapid method of sexing Canada geese, 542
Turtle, snapping, catches pheasant, 383
Tyndale-Biscoe, C. H. Method of marking rabbits for field studies, 42

Uhlig, Hans G. Weights of ruffed grouse in West Virginia, 391

VanEtten, Robert C., see Mitchell, Robert T., 45
Van Gelder, Richard G. and Donald F. Hoffmeister. Canine teeth in white-tailed deer, 100

Warbach, Oscar. Control of Japanese honeysuckle in wildlife borders, 301
Waterfowl
broods, age classification of, 1
cereal grain consumption by, 120
colored leg bands for, 446
loss in muskrat traps, 222
management, beaver in, 398
management by hay crops, 382
production on artificial reservoirs, 276
Weights, gamebird, 36
Wellein, Edward G., see Petraborg, Walter H., 292
Welsh, James P., see Needham, Paul R., 233
Westerskov, Kaj. A note on partridge terminology, 386
Wildlife Society, The
Constitution and By-Laws, 226
Nominations Committee report, 543
Reports of Officers and Committees, 346
Wilson, H. Lee and Edward V. Berard. Autumn colors, an aid to wildlife cover mapping, 98
Wilson, Kenneth A. Raccoon predation on muskrats near Currituck, North Carolina, 113
Witt, Arthur, Jr., see Campbell, Robert S., 218
Wood, John E., see Petrides, George A., 380
Woodcock, sex and age studies in, 29
Wright, Bruce S. Relation of bald eagles to breeding ducks in New Brunswick, 55

Yeager, Lee E. Bone board for big game field workers, 223
Yocum, Charles F. and Stanley W. Harris. Food habits of mountain quail in eastern Washington, 204